

A Framework for Evaluating Health Promotion Programs

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## **A Framework for Evaluating Health Promotion Programs**

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## **Abstract**

Evaluation of health promotion interventions is essential in order to collect evidence about the efficacy of a program, identify ways to improve practice, justify the use of resources, and identify unexpected outcomes. This paper clarifies the role of evaluation as a crucial component of health promotion interventions. Moreover, it summarises the key elements of the most widely used planning/evaluation frameworks necessary for constructive evaluations of health promotion interventions, and incorporates them in to a single approach. It provides a methodical framework for the provision of evaluation guidance to health promotion practitioners and discusses the importance of including evaluation when planning any health promotion intervention. The focus of this paper is on the *essential* elements of the evaluation of health promotion programs.

## **Introduction**

Evaluation focuses on the systematic collection and assessment of data that provides useful feedback about the intervention; and according to Stufflebeam (2001;1), is “about generating information that assists in making judgements about a program, service, policy or organisation”<sup>1</sup>. While Green and Kreuter<sup>2</sup> (1999;220) highlight the need to compare the ‘object’ with something else in order to assess it: evaluation is the “comparison of an object of interest with a standard of acceptability”.

Similarly, the World Health Organization's (WHO) European Working Group on Health Promotion Evaluation (1998; 3) define evaluation as

*the systematic examination and assessment of the features of an initiative and its effects, in order to produce information that can be used by those who have an interest in its improvement or effectiveness.*<sup>3</sup>

This paper seeks to engage health promotion practitioners in a debate about the importance of program evaluation and the *essential* elements of an evaluation. The article's focus is twofold; a discussion about major program planning and evaluation models and a synthesis of the evidence supporting *essential* elements of program evaluation.

## **Why Evaluate?**

The fundamental goal of evaluation is to provide information to a variety of audiences, including government bodies, funding bodies, and professional and client groups; in order to provide accountability, advance health promotion practice and communicate the knowledge gained.<sup>4</sup>

Some of the more specific rationales for evaluation include the determination of the degree of realisation of program objectives; the estimation of the generalisability of a program; and the fulfilment of grant

or contract requirements.<sup>5,6</sup> Which of these various evaluation rationales ought to take priority depends on the goals and perspectives of the stakeholder in question.<sup>2,5,7,8,9,10,11,12,13</sup> For example, policy makers, funding bodies and strategic planners need fiscal evaluations, in order to make decisions about the most efficient use of resources.<sup>7,9,14</sup> Program managers need feedback on whether defined objectives have been achieved, targeted populations reached and the sustainability of envisaged changes.<sup>7,9</sup>

In summary, evaluation can identify ways to improve practice, justify the use of resources, collect evidence about the efficacy of a program and identify unexpected outcomes.<sup>9,15</sup> Yet, despite the benefits that evaluation can bring to health promotion programs, in our experience, the routine inclusion of evaluation in the program planning process remains problematic. The section that follows explores why this might be the case.

## **Challenges in Evaluating Interventions**

There are many reasons why evaluation is not always included in program planning. In our experience, the following factors may contribute to incomplete or non-existent evaluations:

- lack of expertise;
- limited time and/or resources in the team or with the individual;

- a belief that the program will be successful without any evidence;
- no recognition of the benefits of evaluation;
- fear that a poor evaluation will not support the program's continuation;
- the politics of evaluation – for example who wants to know how well the program has been implemented and their *raison d'être*;
- no clarity about the purpose of evaluation; and therefore, the type of program evaluation selected is sometimes inappropriate;
- the costs of external evaluators and the perception that evaluation is a specialised type of research that can only be undertaken by experts.

Another reason why people do not evaluate is that they consider the task too complex and beyond their ability.<sup>2,14</sup> South and Tilford found that barriers to evaluation included controversy about the nature of evidence in health promotion, the difficulties of proving effectiveness, the need for wider acceptance of alternative techniques for evaluating evidence, and the strain of working within a medical model of health.<sup>16</sup>

Some stakeholders argue for an evidence-based practice or experimental approach to health promotion interventions. However, not all programs can, or should be, investigated in this way<sup>3,10,12,17,18,19</sup> and economically these methods can impose an extra burden on interventions.<sup>3,17</sup> There is little consensus regarding what 'evidence' is, or if the concept of evidence

is applicable to the evaluation of interventions.<sup>18</sup> Consequently, it is necessary to adopt a more expansive view of evidence that acknowledges the essential complexity of health promotion;<sup>7,12,18,20,21</sup> and embraces broader indicators of success, for example, equity, community development, empowerment and social mobilisation.<sup>7,12,19,22</sup> Whilst Randomised Controlled Trials (RCTs) are the gold standard for medical treatments, their use is limited in social/behavioural interventions to those that are uncomplicated and explicitly definable.<sup>7,8,23</sup> Health promotion interventions are usually complex and multifaceted,<sup>7,13,23</sup> limiting the use of RCTs for the following reasons: it may not be ethical to withhold the intervention,<sup>1,23</sup> nor to objectify people; achieving random allocation is problematic; and it is difficult to avoid contamination of a control or comparison group.<sup>23</sup> Health promotion interventions may suffer if inappropriate methods of assessing evidence are applied, or health status outcomes and individual behaviour change are given too much weight.<sup>17</sup>

### **Awareness of the limitations**

Health promotion practitioners need to recognise that there may not be an ideal evaluation design or definitive measurement to apply to their program.<sup>15</sup> Plans and methodologies may provide a better or worse fit, for particular settings, behaviours and health conditions.<sup>7</sup> The issue for practitioners then, becomes how to select the most useful evaluation design for the purposes of the particular program and the stakeholders.

The next section outlines some big picture issues to consider when making a decision about the nature and extent of the evaluation.

### *The Politics of Evaluation*

A number of political and/or philosophical issues need to be considered when deciding about the extent of an evaluation. For example, who supports or opposes the program and/or its evaluation, who determines the questions to be addressed and the types of evaluations to be performed; how much organisational commitment is there, especially financial; is the program/evaluation politically sensitive; and what is the contemporary health policy for a particular program and/or population?<sup>6,24</sup> In addition, it is important to acknowledge that the professed program intervention goals (such as behavioural or policy changes) may not correspond with those of the funding body who may have their own agenda, for example, to demonstrate to the public their concern about a social/health problem.<sup>1,11</sup> These differing goals need to be negotiated with funding bodies before the program commences in order to establish realistic expectations.<sup>11,13</sup> This may deal with the problem of funding bodies' expectations about evaluation results that only deal with the positive aspects of the evaluation.

### *Funding the Evaluation*



Regardless of whether program staff or an external evaluator will be doing the evaluation, practitioners should budget for the evaluation at the program planning stage.<sup>25</sup> The minimum amount required for a constructive evaluation is ten percent of the program costs.<sup>3,14,25</sup>

*Is a small-scale evaluation better than none at all?*

Whilst cognisant of White's argument that an evaluation should not be attempted in the absence of time, skills or funding,<sup>12</sup> it may be useful to attempt a small-scale process evaluation, or audit, of the participants' perspectives of the project. This may be preferable to no evaluation at all, for at the very least, practitioners will want to know if the intervention had any negative consequences for the participants. If you can only manage a limited evaluation, then practitioners need to ensure that core aspects are evaluated, and recognise that the results are unlikely to be generalisable to other settings. Because most funded health promotion projects are usually short, process, or impact evaluations are more realistic for health promotion practitioners, than outcome evaluations.<sup>12</sup>

**An External Evaluator?**

The principal reason for hiring an external evaluator is the potential to reduce bias and increase objectivity, since people from within the organisation are likely to have an understandable partiality for their

program.<sup>5,25</sup> Another advantage of employing an outside evaluator is that it releases implementation staff to continue their health promotion work. Furthermore, an external evaluator may bring a novel viewpoint to the project, therefore augmenting the program staffs' repertoire.<sup>25</sup>

When considering using an external evaluator, health promotion practitioners need to weigh up a variety of factors: these include their background, i.e. an academic may have a different perspective from someone who comes from another background. In addition, people from different backgrounds or organizations may have different politics, identify different problems and solutions, and emphasise different types of evidence. Regardless of any evaluator's affiliations; their values, perspectives and theoretical position will directly influence their evaluation.<sup>14</sup> The previous quality of the evaluator's work is also relevant, as is their familiarity with the type of program you are running, and the specific program. Furthermore, the program's funding will dictate the calibre of whom you can employ and for what period. The following section précis contemporary, essential evaluation models, and outline our suggested elements for the evaluation process

## **Contemporary Models**

There are some important models of contemporary health promotion evaluation that should be considered and appropriately applied. Such

models help to focus attention on priorities, and are useful to both researchers and practitioners when developing, or deciding on, health interventions.<sup>26</sup> Stufflebeam (2001;37) asserts that program evaluation can begin with “a well-developed and validated theory of how programs of a certain type within similar settings operate to produce outcomes”.<sup>1</sup> Such approaches include the PRECEDE/PROCEED framework of Green and Kreuter.<sup>2</sup> Comparable frameworks can increase a program’s efficacy because they afford a realistic edifice for evaluation.<sup>1</sup> An important aspect of theory-based evaluations is the determination of the positive or negative elements of outcomes, and the provision of direction for program improvement.<sup>1</sup> Contemporary models can provide a convincing evaluation structure for a program’s effectiveness; however, few programs are founded on well-articulated theories.<sup>1,24</sup>

Many contemporary models stress that health promotion programs frequently entail wide-ranging procedures targeting different levels of activity; for example, education, which influences individuals; community development, relating to empowerment; and capacity building, concerned with enhancing the expertise and knowledge of individuals, organizations and communities. In addition, there is an emphasis on progressing methodically through the stages of health promotion planning and evaluation, beginning with the assessment of needs and identification of the target population and priorities, through to defining outcome objectives (crucial for evaluation). However, a logical process of planning

and evaluation is not always possible or desirable. Sometimes the process requires considerable review through formative evaluation.

### **Is there a checklist of essential elements?**

Planning, implementation and evaluation are parts of a repetitive cycle where evaluation involves revisiting the planning process steps (see Figure 1). Evaluation should be viewed as a unitary stage in the planning process and there are elements common to planning models. The elements of a program include, for example, conducting a needs assessment, defining the program goals, defining the populations of interest and defining the outcome objectives.

Evaluation is often interpreted as part of a larger project management cycle; however, the distinctions between planning, implementation and evaluation are not always clear. For example, during the planning stage, which is the first phase of the cycle, the steps may include a needs assessment, a review of strategic documents and mandates, and accessing existing data about a particular population. The planning phase is designed to structure the strategies and to devise the best way for the implementation to proceed. Depending on the problem being addressed, a planning process could include the formulation of the problem, conceptualisation of possible strategies to address the problem and their implications.

Some of the essential decisions for practitioners, are to determine why, how and what types of evaluation will be used.<sup>6</sup> The evaluators need to ask whether the evaluation plan: has well-defined program objectives and measures of impact and outcome; specifies tasks, methods and procedures; and clarifies the resources to be allocated to realize the core objectives.<sup>6</sup>

(Figure 1 about here)

The authors believe there are some fundamental elements in the evaluation process that must be included in a program evaluation. The following section identifies these, and they are described in more detail in Tables 1-3. In addition, we should always remember that evaluation is not a strictly sequential process; rather, it is more of a cyclical or circular process where issues are revisited and reconsidered.

## **Problem Analysis & Needs Assessment**

(Table 1 about here)

The first stage in the process involves the definition of the crucial health priorities for a particular population; and the determination of elements to be targeted. There is no fixed procedure for undertaking a needs

assessment, as the methods will depend on the size of the project and the community, and the available skills and resources.<sup>13</sup>

Table 1 provides examples of methodologies used to determine health priorities and the contributing factors to be targeted. This stage also includes engagement with stakeholders, in order to ensure credibility and provide a framework for your evaluation;<sup>24</sup> the establishment of objectives and goals, which is central to the program planning and evaluation process; and finally, pilot testing, which is required in order to determine the suitability of the intervention for the targeted community.

## **Program planning & Implementation**

(Table 2 about here)

The second stage involves selecting the strategies; these are well-defined activities that are implemented in a prescribed manner in order to achieve the goals and objectives of the program. It is important that a process evaluation is performed during this stage, rather than undertaken as a postscript, to ensure that the program is being implemented as intended.<sup>25</sup>

## **Evaluation & Dissemination**

(Table 3 about here)

The discussion of evaluation as the last stage of an intervention is misleading, as evaluation is an integral part of the program that should be incorporated early on in program planning.<sup>5,24</sup> There are three phases of evaluation: process/formative evaluation (discussed above), impact evaluation, and outcome evaluation.<sup>15</sup>

The impact evaluation is the measurement of the immediate effects of the intervention, and usually relates to the program objective.<sup>15</sup> Clearly defined objective(s) will facilitate this phase of the evaluation.<sup>7,24,25</sup> The outcome evaluation is the assessment of longer-term effects of the intervention, and typically relates to the program goal.<sup>15</sup>

There are a number of issues to be considered at the evaluation and dissemination stage, these include the evaluation management, i.e., how do you deal with all the players in the evaluation process and their individual expectations about program outcomes. Moreover, how do you consider the 'tyranny of evaluation', i.e., how do you prioritise the number and range of evaluation methods in order to ensure the participants do not bear an excessive burden of the evaluation process.

A program that delivers a benefit for people needs to be communicated so others may also benefit. Similarly, one that fails to deliver, or has

unintended effects, needs to be communicated to allow for the reassessment of underpinning theories, program design or implementation.<sup>15,24</sup> Fundamentally, for those involved in the program delivery, the evaluation is about what was learnt and how that information can be fruitfully applied in the future.

## **Conclusions**

Research clearly demonstrates that the effectiveness of health promotion interventions can be substantially improved with the appropriate application of evaluation techniques. Equally, the field of health promotion, like any field of professional endeavour, can only move forward when the outcomes of comprehensive evaluations of what does and what does not work are made available to practitioners. Despite this strong need for evaluation, as existing literature and research shows, the evaluation of health promotion programs is often problematic due to a variety of personal, situational and institutional factors that can inhibit or prevent effective evaluations. Furthermore, there is little consensus about appropriate techniques. These impediments to evaluation can be overcome with the implementation of specified evaluation guidelines, methods and practices, and the sharing of evaluation results amongst the profession.



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Table 1. Planning and Evaluation Checklist: Problem Analysis & Needs Assessment

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**Getting started**

Deciding what issues need to be considered in the planning and evaluation cycle

- Define the health priorities for a particular population;
- Decide the environmental or behavioural factors to be targeted, for example, individual beliefs or organisational practices<sup>27</sup>
- Identify the stakeholders and their concerns, values, expectations and agenda<sup>24</sup>

**Methods:**

- Focus groups
- Questionnaires
- Surveys
- Analysis of epidemiological and/or demographic data.<sup>24,13</sup>

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**Determine Program Objectives/Goals/Mission**

Outline a hierarchy of outcomes to guide action, and to link strategies and evaluation

- Objectives need to specify the target population, the projected health benefit, the size of the benefit to be achieved, and when the benefits will be achieved<sup>6</sup>
- Goals provide the framework for program planning and, as such, provide a set of clear end-points around which many strategies can be organised. As the health promotion situation changes, the strategies may change but goals are rarely affected.

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**Pilot testing**

This stage serves to provide feedback about the quality and suitability of the program for the target community; in addition, it engages the community thus ensuring their commitment to the project<sup>24</sup>

- Decide how many participants
  - Undertake formative evaluation through the development and testing of materials and methods
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Table 2. Planning and Evaluation Checklist: Program planning & Implementation

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**Select and describe strategies and methods**

A strategic plan of action should anticipate the barriers and resources required to achieve a specified objective<sup>2</sup>

- Selection is linked to objectives
- A sound understanding of theories of behaviour change is crucial so that health promoters can more accurately inform their strategy selection in those programs with a behaviour change focus<sup>24</sup>
- Determine costs - decide what resources (human, financial, time) are available to meet the planned actions
- Data Collection – decide what, when, and how to measure (pre-intervention testing - otherwise there is no basis for doing a reasonable evaluation, and post testing)
- Data Analysis – decide how much and what should be analysed
- Using external evaluators: consideration needs to be given as to whether you/your team have the expertise, resources and time to develop the necessary skills and competence, to perform the evaluation. If not, you may need to employ an external evaluator to do it.

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**Implementation process**

An implementation plan needs to be developed and the process managed in detail.

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**Process evaluation**

The primary purpose of process evaluation is to provide information about program improvements; by establishing whether the implementation is proceeding as planned, i.e.,

- is the program is reaching all parts of the target group,
- are all the materials and components of the program of good quality,
- are all the planned activities of the program being implemented,
- are all the participants satisfied with the program<sup>7,15,25</sup>

**Methods:**

- Questionnaires for participants and health promotion practitioners
- Focus groups involving participants and practitioners
- Checklists
- Observation.

If the intervention is not yielding the expected results, then it is useful to revisit the implementation process to establish the extent to which improvements can be effected, then re-implement and reassess.<sup>15</sup>

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Table 3. Planning and Evaluation Checklist: Evaluation &amp; Dissemination

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**Evaluation procedures**

Before undertaking the next two evaluation stages, it is useful to conduct an evaluability assessment<sup>15</sup>, i.e., determining whether the program is functioning well and likely to be having an effect.

**Impact evaluation**

This measures the immediate effect of the program, ie whether it meets its objectives;<sup>15</sup> by assessing what changes, if any, have occurred in the predisposing, reinforcing and enabling factors, targeted behaviours and the environment<sup>2,6</sup>

**Methods:**

- Pre/post test questionnaires administered to the participants.
- A self-reported, post-evaluation questionnaire for participants could be utilised if no pre-evaluation test has been undertaken.
- Focus groups to expand on information gathered from participants as a means of identifying themes for question development.
- For practitioners, a checklist could be completed<sup>15,24</sup>

**Outcome evaluation**

This measures the long-term effects of the program, i.e., whether it meets its goals;<sup>15</sup> by determining what changes, if any, have occurred in health status and quality of life.<sup>2,6</sup>

**Methods:**

- Intermediate outcomes could be assessed by three and six month post-intervention questionnaire for participants.
- Health-promotion staff who delivered the intervention could be followed up with a questionnaire.

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**Dissemination of the results**

To whom, and for what purpose, are we disseminating the results?

- For an evaluation to influence decision-making, it is important to consider how best to reach the decision-makers so their specific interests can be targeted.
- The style and emphasis of an evaluation report will depend on the intended audience and the elements that are important to them.<sup>6,25</sup>
- Regardless of who the readers are, they will all need to know the intended goals of the project, why those goals were important,<sup>6</sup> and to what extent they were achieved.
- A formal report delineating the program's processes and outcomes may provide guidance to others in future decision-making about health promotion programs, it may be used to determine if, and how, to modify the existing program, and whether it could be fruitfully applied to other settings.<sup>6,7</sup>

**Methods:**

The dissemination could take a variety of forms, for example:

- press release
  - seminar presentation
  - newspaper article
  - published report
  - journal article.<sup>4,5</sup>
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Figure 1: Planning, Implementation and Evaluation Model

